

Amendments to the Specification

Please replace the paragraph beginning on page 9, line 19 ("The novel peptide sequences of the present invention . . .") with the following amended paragraph:

--The novel synthetic peptide sequences of the present invention are homologous to selected regions [[of]] present within the fibrin molecule, yet retain certain derived properties of the entire molecule, such as cell adhesive effects, for example. The specific sequences of these haptotactic peptides are KGSWYSMRKMSMKIRPFFPQQ (peptide-C β (code name - (09), hereinafter referred to as 'peptide-C β ', (SEQ ID NO: 1)), KTRWYSMKKTTMKIIPFNRL (peptide preC γ , (code name 70a, hereinafter referred to as 'peptide preC γ ', (SEQ ID NO:2)) and RGADYSLRAVRMKIRPLVTQ (peptide- C α E, (code name (71), hereinafter referred to as peptide- C α E, (SEQ ID NO:3)).--

Please replace the paragraph beginning on page 14, line 11 ("FIG. 1 shows the haptotactic responses of . . .") with the following amended paragraph:

-- FIG. 1 shows the haptotactic responses of cells to sepharose beads (SB) coated with active C-terminal fibrinopeptides (either C β (SEQ ID NO: 1), preC γ (SEQ ID NO:2) and C α E (SEQ ID NO:3)) in comparison with positive controls fibrinogen (Fib) or fibronectin (FN) and in contrary to non-active C α peptide (SEQ ID NO:4) and the minor negligible activity of the C γ peptide (SEQ ID NO:5). The ligands covalently-bound to SB were added to near confluent cell culture of SMC, HF and BAEC in 12-well plates. The rate of attachment was monitored visually by counting the % of attached SB over time. The C α (SEQ ID NO:4) was inactive, whereas C β (SEQ ID NO:1), preC γ (SEQ ID NO:2) and to a lesser degree C α E (SEQ ID NO:3) were highly haptotactic, with response kinetics equivalent to fibrinogen and somewhat less than with fibronectin.--

Please replace the paragraph beginning on page 17, line 13 ("In particular, these haptotactic peptides . . .") with the following amended paragraph:

-- In particular, these haptotactic peptides are composed of a sequence homologous to 19-21 amino acids sequence at the carboxy ~~terminal~~ terminus of the β chain (termed C β or code 09, (SEQ ID NO:1)) and a sequence (termed C α E or code 71, (SEQ ID NO:3)) homologous to the C-terminus sequence of the recently discovered α E chain, the so-called extended α E segment (α E) (Fu, Y. and Grieninger, G. "Fib₄₂₀: A normal human variant of fibrinogen with two extended α chains,"[[,]] *Proc. Natl. Acad. Sci. USA*,

91:2625-2628, (1994)). Additionally, is included preC γ (70A) (SEQ ID NO:2), a 20 mer peptide homologous to the internal 7-chain fibrinogen chain sequence at address γ 373-392 (411 total) (termed preC γ or code 70A). Two other 19-21-mer peptides homologous to the C-termini of the α and the γ chains (termed C α or code 07 (SEQ ID NO:4) and C γ or code 71 (SEQ ID NO:5)[(I)] respectively) are described and used as controls for haptotactic tests. Sequences of these peptides are given in Table 1 below.--

Please replace the paragraph beginning on page 18, line 12 ("Hereinafter, the term "haptotactic peptide" refers to . . . ") with the following amended paragraph:

--Hereinafter, the term "haptotactic peptide" refers to peptides- C β (SEQ ID NO:1), C α E (SEQ ID NO:3) or preC γ (SEQ ID NO:2), having a sequence selected from the group consisting of: KGSWYSMRKMSMKIRPFFPQQ (SEQ ID NO:1), KTRWYSMKKTTMKIIPFNRL (SEQ ID NO:2) or RGADYSLRAVRMKIRPLVTQ (SEQ ID NO:3); as well as to analogues, derivatives, equivalents or peptido-mimetics thereof, displaying substantially identical or similar functional activity as one of the above-listed sequences. Peptides C β (SEQ ID NO:1) and preC γ (SEQ ID NO:2) elicited the greatest haptotactic activity, followed by peptide C α E (SEQ ID NO:3).--

Please replace the paragraph beginning on page 22, line 1 ("The DNA and RNA sequences . . . ") with the following amended paragraph:

-- The DNA and RNA sequences that code for the amino acids of the haptotactic peptides were deduced. Without wishing to be limited, one example of DNA sequences that code for the amino acids of the haptotactic peptides is as follows:

C β - DNA (SEQ ID NO:7)

[[...]]AAGGGGTCATGGTACTCAATGAGGAAGATGAGTATGAAGATCAGGCCC
TTCTTCCCACAGCAA TAG[[..]]

C α E - DNA (SEQ ID NO:8)

[[...]]AGAGGGGCAGATTATTCCTCAGGGCTGTTCGCATGAAAATTAGGCCC
CTTGTGACCCAA TAG

PreC γ - DNA (SEQ ID NO:9)

[[...]]AAAACCCGGTGGTATTCCATGAAGAAAACCACTATGAAGA,rAAT000AT
TCAACAGACTCACA[[...]]--